

Summary of Legislative Proposals to Advance the Market Penetration of Natural Gas Vehicles

ENERGY POLICY

1. Ensure that NGVs (natural gas and biomethane) are explicitly included in any legislation intended to achieve President Bush's 2017 goal of using 35 billion gallons per year of renewable and alternative fuels.
2. Direct DOE to establish an NGV RDD&D program with industry input (authorized at \$20 million per year for five years).
3. Include cellulosic biomethane in all cellulosic federal biofuels policies/programs.
4. Require EPA to allow companies that make NGV conversion systems to use less expensive methods to comply with on-board diagnostic system-related requirements, and otherwise reduce barriers to the introduction of vehicle conversion systems that facilitate the use of alternative fuels.
5. Establish a grant program at DOE to fund Clean Cities projects from fines from violations of the CAFE program
6. Broaden the eligibility requirements for vehicles under FAA's VALE program
7. Ensure that NGVs are included in any incentive program provided to the Detroit OEMs to produce advanced technology and alternative fuel vehicles.

TAX INCENTIVES

8. Alternative Fuel Excise Tax Credit
 - a. Extend the excise tax credit provided for alternative fuels through December 31, 2016 to facilitate reaching the national alternative fuel displacement goal of 35 billion gallons by 2017
 - b. Do not include the value of the tax credit as income for taxable entities
 - c. Make tax credit available on the same accelerated basis as alternative fuel mixtures

9. Alternative Fuel Vehicle Income Tax Credit for Purchasers
 - a. Extend the alternative fuel vehicle purchase income tax credit through December 31, 2016 to facilitate reaching the national alternative fuel displacement goal of 35 billion gallons by 2017
 - b. Expand the tax credit to cover 90 percent of the incremental price of all dedicated NGVs
 - c. Amend the tax provision to cover 50 percent of the incremental price of bi-fueled NGVs
 - d. Exempt the tax credit for businesses from minimum tax provisions
10. Alternative Fueling Station Income Tax Credit
 - a. Extend the credit through December 31, 2016
 - b. Increase the home alternative fuel infrastructure credit to a maximum of \$2,000
11. AFV and Fueling Infrastructure Tax Credit for Not-For-Profits
 - a. Provide public agencies the option of receiving the value of the credits for alternative vehicles and alternative vehicle fueling infrastructure as a grant or other direct federal payment.
12. Biomethane Production Credit
 - a. Expand uses of biogas eligible for the Section 45 tax credit to include biomethane
13. Tax Credits for Off-Road Vehicles
 - a. Extend the vehicle, infrastructure and fuel use tax credits to off-road equipment

FY 2008 APPROPRIATIONS

14. Provide \$20 million for FY2008 on-road NGV RDD&D
15. Provide \$20 million for DOE's Clean Cities program
16. Fully fund EPA's Clean School Bus Program at the authorization of \$55 million
17. Provide funding for several biogas-to-biomethane production projects

Discussion of Legislative Proposals to Advance the Market Penetration of Natural Gas Vehicles

ENERGY POLICY

- 1. Ensure that NGVs (natural gas and biomethane) are explicitly included in any legislation the objective of which is achieving President Bush's goal of using 35 billion gallons per year of renewable and alternative fuels by 2017.**

Since the President's State-of-the-Union address, there has been substantial confusion concerning his goal of using 35 billion gallons of non-petroleum fuel annually by 2017. It is clear from the White House documentation issued in conjunction with the address that that goal included renewable as well as alternative fuels. Congress should ensure that natural gas and biomethane when used as a transportation fuel are explicitly included in any legislation passed to help achieve the President's goal.

- 2. Direct DOE to establish an NGV RDD&D program with industry input (authorized at \$20 million per year for five-years)**

At one time, the Department of Energy had a robust on-road NGV RDD&D program based on a joint public/private sector plan. Several years ago, DOE's Energy Efficiency and Renewable Energy programs shifted emphasis to long-term, high-risk R&D (e.g., hydrogen vehicles). Since then, the Administration has requested no funding for NGV RDD&D. That is unfortunate since such a program is even more necessary today. For NGVs to achieve their market potential, federally funded RDD&D is needed to expand product offerings of engines to meet a wider range of applications. In addition, the process of integrating those natural gas engines into additional medium- and heavy-duty vehicle platforms must be accelerated. Those platforms include school buses, transit buses, trash trucks, delivery trucks and over-the-road trucks. Natural gas hybrid-electric platforms must be expedited, too. In addition, the cost and weight of compressed and liquefied natural gas storage systems must be reduced. Finally, work must continue on improving NGV and NGV fueling safety codes and standards. Given the current priority to move America away from reliance on foreign oil and the potential of NGVs to play a significant role, Congress should authorize DOE to establish such an RD&D program again.

3. Include cellulosic biomethane in all cellulosic biofuels policies/programs

There are three major biofuels – bio-ethanol, biodiesel and biomethane. In Europe, there is a growing initiative to develop commercial cellulosic biomethane projects, which they believe is more energy-efficient and less costly than bio-liquids. However, the US federal government (both Congress and the Administration) focuses only on bio-liquids in their policies and programs (especially USDA programs). Those policies and programs should be broadened to explicitly include biomethane.

4. Require EPA to allow companies that make NGV conversion systems to use less expensive methods to comply with on-board diagnostic system-related requirements

EPA requires on-board diagnostic systems (OBDs) on light-duty cars and trucks (and will soon require similar systems on heavy-duty vehicles) to detect when the vehicle's emission control system may be operating improperly. The OBD system (and its related software) is proprietary to the OEMs. To require conversion system manufacturers to perform the same testing as the original OEM is prohibitively expensive, and this has impeded the expansion of the aftermarket conversion system industry. There are alternative methods and procedures that EPA could offer that are much less expensive, but would be as reliable in detecting whether the emission control system in an NGV is working properly. Congress should encourage EPA to move quickly to allow these less expensive methods and procedures to be used. Moreover, EPA should be encouraged by Congress to review its certification procedures and remove barriers that impede the increased use of conversion systems that allow vehicles to operate on alternative fuels.

5. Establish a grant program at DOE to fund Clean Cities projects from fines from violations of the CAFE program

Proposals (HR.570 and S. 331) have been reintroduced in the House and the Senate that would establish a grant program at the Department of Energy to be funded by fines from violations of the CAFE program. The Clean Cities program would be responsible for distributing the grants. The monies would be used to fund alternative fuel infrastructure and related projects. This legislation is similar to last year's measures, with grants limited to no more than \$30,000 and any refueling station limited to no more than \$90,000 in a fiscal year. NGVAmerica recommends that the

legislation be amended to allow up to \$100,000 per grant, and to give DOE the authority to fund any project under the Clean Cities umbrella – not just alternative fuel stations.

6. Broaden the eligibility requirements for vehicles under FAA’s VALE program

The federal government’s airport program is due to be reauthorized during the 110th Congress. The program includes the NGV America promoted VALE program. VALE was established by Congress, in part, to provide incentives for America’s airports to implement alternative vehicle programs. Currently, however, VALE is quite restrictive as to vehicles that may qualify for Airport Improvement Program (AIP) funding. As a result, very few airport alternative fuel projects have been submitted under AIP. NGV America has a number of recommendations that would make VALE/AIP more flexible, and therefore, more effective in phasing alternative fuel vehicles into curb- and tarmac-side vehicles operating at airports.

7. Ensure that NGVs are included in any incentive program provided to U.S. OEMs to produce advanced technology and alternative fuel vehicles.

There have been a number of proposals introduced or discussed in Congress to provide U.S. automakers with incentives to produce advanced technology and alternative fuel vehicles. Most of the incentives discussed focus on gasoline-hybrids, diesels and ethanol vehicles. NGVs should be explicitly included in any such legislation.

TAX INCENTIVES

8. Alternative Fuel Excise Tax Credit

The 2005 Transportation Law (SAFETEA-LU, § 11113, Pub. L. No. 109-59) provides tax incentives for natural gas and other alternative fuels when used as vehicle fuels. That alternative fuel credit expires on 9/30/2009. This short timeframe sends the wrong message to businesses and consumers about the government’s support for NGVs, and is inconsistent with the President’s petroleum replacement goal of 35 billion gallons by 2017. Therefore, this incentive should be extended until the end of 2016. Moreover, Congress should clarify that the tax credits provided for alternative fuels are not includable in income since such treatment would significantly discount the benefit (and, therefore, the impact) of this incentive. The IRS is currently looking

at the treatment of the tax credits when taken by taxable entities and has indicated that they may be includable income. Also, the tax credits for alternative fuels should be amended so that they are available on an accelerated basis just like the alternative fuel mixture credits; taxpayers filing for alternative fuel credits currently must wait until end of year to file certain claims (over and above excise tax offsets) while persons filing for alternative fuel mixture credits may file multiple claims during the year for payments from the government.

9. Alternative Fuel Vehicle Purchase Income Tax Credit

The 2005 Energy Law (EPAAct 2005, § 1341, Pub. L. No. 109-58) provides tax credits for the purchase of dedicated alternative fuel vehicles (including NGVs). The alternative fuel vehicle credit expires on 12/31/2010. The short timeframe for this incentive sends the wrong message to businesses and consumers about the government's support for NGVs, and is inconsistent with the President's petroleum replacement goal. Therefore, the incentive should be extended until 2016. The existing credit covers 80 percent of the incremental price for dedicated vehicles that meet the most stringent emission standards, and 50 percent for other dedicated vehicles. Since much of the emphasis on promoting alternative fuels has shifted to petroleum displacement and since dedicated NGVs displace 100 percent of the petroleum that would otherwise have been used, the credit for all dedicated vehicles should be expanded to 90 percent of the incremental price. Congress also should provide a credit of 50 percent of incremental cost for the acquisition of bi-fuel NGVs since some customers will continue to demand the flexibility of a multi-fuel vehicle until fueling infrastructure is more widespread. In order to make these credits attractive to businesses, they should be exempt from tentative minimum tax provisions. Imposition of the tentative minimum tax means that most large fleets are only able to use the tax credits as an incentive to acquire a very small number of new NGVs each year. Fleets represent the best opportunity to maximize the use of alternative fuels but this opportunity will not be realized if fleets receive an incentive that encourages no more than one or two NGV acquisitions each year.

10. Alternative Fueling Station Income Tax Credit

EPAAct 2005 (§ 1342, Pub. L. No. 109-58) provides for an income tax credit of 30 percent up to a maximum of \$1,000 for NGV home refueling. This is inadequate to truly spur home fueling expansion. The cost of even the least expensive home refueler (with installation) can be upwards of \$5,000. Therefore, the fueling station

credit should be increased to a maximum of \$2,000. This credit, too, should be extended to 12/31/2016.

11. AFV and Fueling Infrastructure Tax Credit for Not-For-Profits

As mentioned above, EPAct 2005 (§§ 1341 -1342, Pub. L. No. 109-58) provides an income tax credit for part of the incremental price of new alternative fuel vehicles and alternative fuel stations. Congress wished to ensure that public agencies also could benefit from this incentive, so it provided that, when the purchaser is a public entity, the income tax credit can be passed back to the vehicle or equipment seller – with the expectation that the seller would pass some or all of the incentive to the buyer in the form of a lower purchase price. For a number of reasons, however, very few public agencies have been able to take advantage of this option. Frequently, the sellers do not have sufficient tax liability. Transit bus manufacturers are a good example. In other cases, the alternative minimum tax eliminates the seller's ability to capture (and, therefore, pass on to the public agency) the tax credit. To provide public agencies with a clear and certain incentive to buy alternative fuel vehicles and install associated fueling stations, Congress should provide public agencies with the option of receiving the value of the credit as a federal grant or other direct federal payment.

12. Biomethane Production Credit

Currently, biogas (i.e., methane-rich gas produced from animal waste, crop waste, crops, sewage and landfills) that is used to produce electricity is eligible for a Section 45 tax credit. However, if that same biogas is used directly (e.g., for on-site steam production) or is converted to pipeline quality methane and used for any other purpose, the biogas producer receives *no* credit. All use of renewable biogas should be encouraged. Therefore, the Section 45 biogas credit should be redefined to include all energy uses of biogas.

13. Tax Credits for Off-Road Vehicles

The vehicle, infrastructure and fuel use credits for alternative fuel vehicles included in the 2005 Energy and Transportation laws are limited mostly to on-road vehicles. However, about a quarter of the fuels used in transportation are used in off-road vehicles. Since these vehicles do not have to meet on-road vehicle emission standards, they tend to produce far more emissions than comparable on-road vehicles. To help reduce our dependence on foreign oil as well as air pollution, these vehicles should be

provided financial incentives to move more quickly to non-petroleum fuels and technologies.

Appropriations

14. Provide \$20 million for FY2008 on-road NGV RDD&D

As mentioned above, the Department of Energy once had a robust on-road NGV RD&D program, but that has been eliminated. Given the current priority to move America away from reliance on foreign oil and the potential of NGVs to play a significant role, Congress should appropriate funding for an on-road NGV RD&D program at DOE.

15. Provide \$20 million for DOE's Clean Cities program.

Through 89 public-private partnerships operating in 39 states, the Clean Cities program is the most effective means available for (1) educating the public about non-petroleum alternative fuels, (2) accelerating the market penetration of those fuels and vehicles and (3) laying the groundwork for public acceptance of hydrogen-based transportation. Given the need to move America away from dependence on petroleum-based fuels, increased funding for the Clean Cities program is a prudent and necessary investment. The Administration's request of \$9.5 million for Clean Cities in FY2008 is woefully inadequate given the role that Clean Cities can play in reducing U.S. oil dependence, which is an Administration and Congressional priority. Funding level should be increased to \$20 million.

16. Fully fund EPA's Clean School Bus Program at the FY2007 authorization of \$55 million

The 2005 Highway and Energy Bills authorized a number of programs to help reduce pollution and reduce petroleum use by existing diesel vehicles. The most important of these is an historic program to replace or retrofit America's aging school bus fleet with cleaner and more energy efficient technologies – including natural gas engines. Congress authorized \$55 million for this program for 2007. The House appropriated only \$28 million for a package of programs that include the Clean School Bus program as well as the Diesel Energy Reduction Program; the Diesel Truck Retrofit and Fleet Modernization Program; and the Idle Reduction program. Even if the Clean School Bus Program were to receive a quarter of the funding, that would only

be \$7 million – an inadequate amount given the need.

17. Provide funding for several biogas-to-biomethane production projects

There is a huge potential for converting landfill gas, animal and crop waste and sewage to biomethane throughout the U.S. Congress should provide funding for a number of such projects to demonstrate the technology.